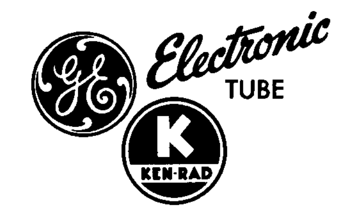


6AN5
Description and Rating
BEAM POWER AMPLIFIER

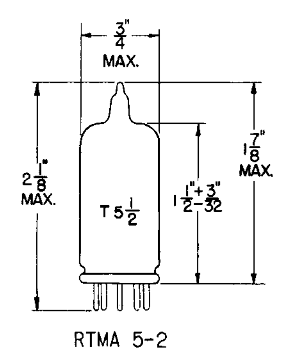
GENERAL DESCRIPTION

Principal Application: The 6AN5 is a miniature beam-power amplifier designed for use as a wide-band radio-frequency or video power amplifier in equipments with relatively low plate supply voltages. The tube is capable of operation at high plate current levels and exhibits a high transconductance.

Cathode:	Coated Unipotential
Heater Voltage (A-C or D-C)	6.3 Volts
Heater Current	0.45 Ampere
Envelope:	T-5½, Glass
Base:	E7-1, Miniature Button 7-Pin

Mounting Position:	Any	
Direct Interelectrode Capacitances: #		
Grid 1 to Plate (Max)	0.075	μμf
Input	9.0	μμf
Output	4.8	μμf

PHYSICAL DIMENSIONS

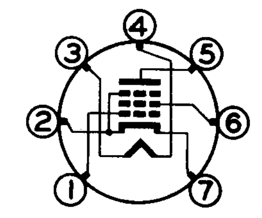


RTMA 5-2

TERMINAL CONNECTIONS

Pin 1 - Grid Number 1
Pin 2 - Cathode and Beam Plates
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid Number 2 (Screen)
Pin 7 - Cathode and Beam Plates

BASING DIAGRAM



RTMA 7BD
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES:

Plate Voltage	120	300	Volts
Screen Voltage	120	300	Volts
Plate Dissipation	4.2	1.70	Watts
Screen Dissipation	1.4	0.56	Watts
Cathode Current	50	20	Milliamperes
Bulb Temperature at Any Point	140	140	Centigrade
Grid Number 1 Circuit Resistance			
With Fixed Bias *	0.1	0.1	Megohm
With Cathode Bias	0.1	0.1	Megohm

CHARACTERISTICS AND TYPICAL OPERATION

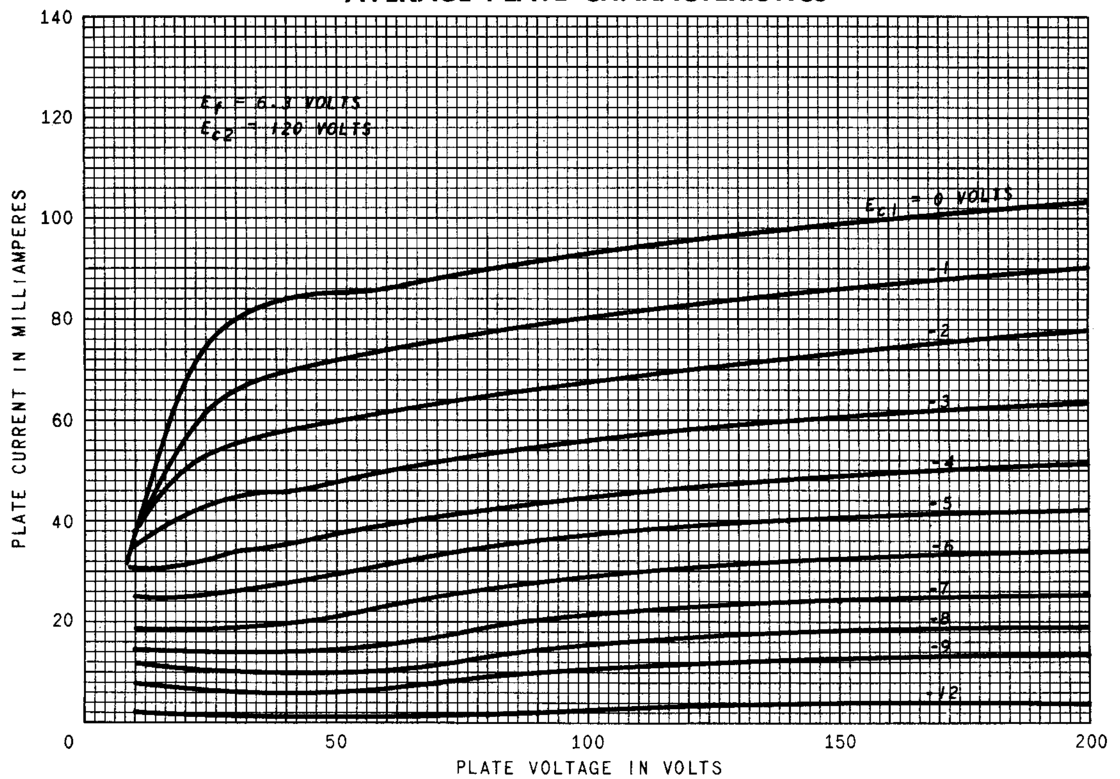
CLASS A_1 AMPLIFIER

Plate Voltage	120	Volts
Screen Voltage	120	Volts
Cathode Bias Resistor	120	Ohms
Plate Resistance (Approx)	12500	Ohms
Transconductance	8000	Micromhos
Plate Current	35	Milliamperes
Screen Current	12	Milliamperes
Load Resistance	2500	Ohms
Power Output (Approx)	1.3	Watts
Plate Current (Max) for E_{c1} = -20 Volts	1.0	Milliampere

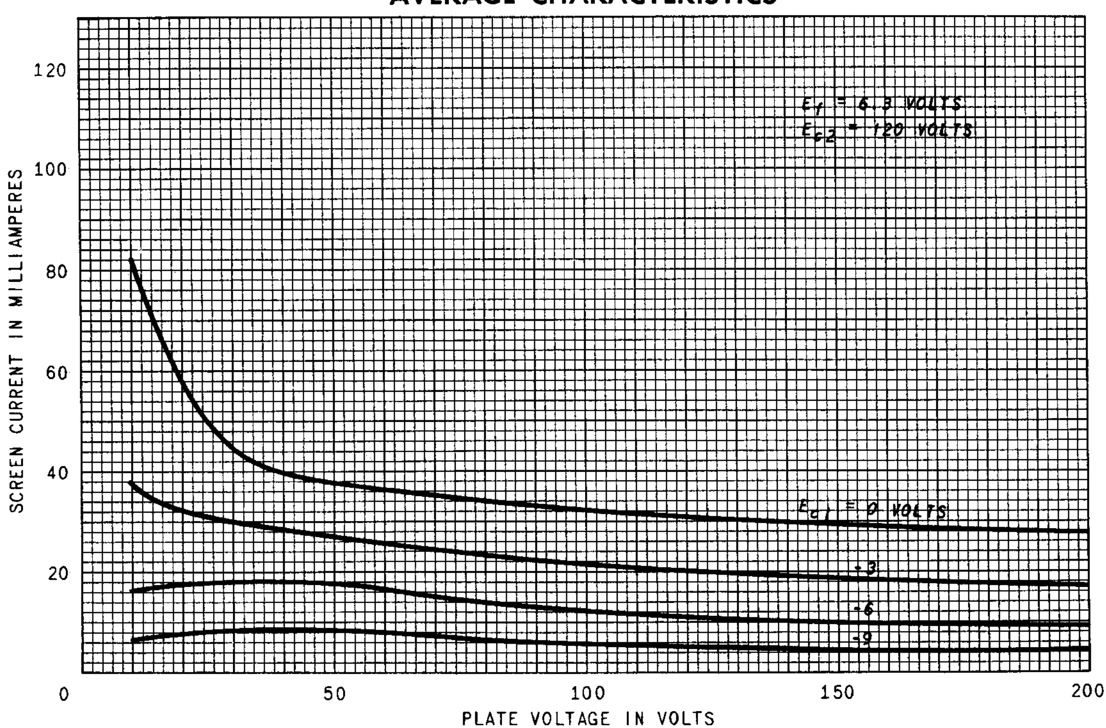
With external shield #316 connected to cathode

* *Fixed bias operation is recommended only when the plate and screen dissipation is less than 70 percent of the design-center maximum ratings.*

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Department, Electronics Division



GENERAL ELECTRIC

Schenectady, N. Y.

ET-T794
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